Temporary Routes Closure and Interim Open Vehicle Routes
NEWBERRY-RODMAN Subregion
San Bernardino County, California

ENVIRONMENTAL ASSESSMENT CA-680-01-60

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CHAPTER 1

INTRODUCTION

The Bureau of Land Management (BLM) proposes to temporarily close the area known as the Newberry-Rodman Planning Unit, located southeast of Barstow, CA, to public vehicle access with the exception of a specified network of open routes. Details of area location, size, current uses, and other allowable uses as defined in land use plans for the area follow in this document. This action is proposed as a result of two initiatives: developing routes of travel designations for the West Mojave Plan and a lawsuit filed by three interest groups.

CONSISTENCY WITH LAND USE PLANS AND OTHER REGULATORY COMPLIANCE

Current Land Use Plan and Executive Orders

The proposed closure conforms to the *California Desert Conservation Area (CDCA) Plan,* 1980, as amended, which allows for the taking of appropriate action, including closure of routes and areas, if monitoring indicates inappropriate uses are occurring or uses are having deleterious affects to natural resources (CDCA Plan, page 82, reprinted version). The proposed action is in conformance with Title 43 of the Code of Federal Regulations (CFR), Subpart 8341, regarding Special Rules. Prior to making a decision, BLM will consult with the U.S. Fish and Wildlife Service (USFWS) pursuant to Section 7 of the Endangered Species Act, 16 U.S.C. §1536 (ESA) and its implementing regulations in 50 CFR §402.14. The closure is also within the area covered by the West Mojave Plan, and amendment being developed to the CDCA Plan.

The proposed action also conforms with the following two executive orders:

1. Executive Order 11644 ("*Use of Off-Road Vehicles on the Public Lands*"), February 9, 1972 (87 F.R. 2877), to establish policies and provide for procedures to control and direct the use of Off Highway Vehicles (OHVs) on federal lands so as to (1) protect the resources of those lands, (2) promote the safety of all users of those lands, and (3) minimize conflicts among the various uses of those lands, and
2. Executive Order 11989 ("*Off-Road Vehicles on Public Lands*"), May 24, 1977 (42 F.R. 26959), amending the previous order. This amendment strengthened protection of the lands by authorizing agency heads to (1) close areas or trails to OHVs causing considerable adverse effects and (2) designate lands as closed to OHVs unless the lands or trails are specifically designated as open to them.

Routes of Travel designations and the West Mojave Plan

The BLM developed regulations (43 CFR 8340) in response to the executive orders. These regulations require the agency to designate areas and trails where OHVs may be used and to manage the use of OHVs on public lands through the resource management planning process, which includes public participation. This action is currently in effect as an integral part of the West Mojave planning process. The regulations also require the BLM to monitor the use of

OHVs, identify any adverse effects of their use, and take appropriate steps to counteract such effects.

Lawsuit

On March 16, 2000, the Center for Biological Diversity, and others (plaintiffs) filed for injunctive relief in U.S. District Court, Northern District of California (Court) against the BLM alleging that the BLM was in violation of Section 7 of the ESA by failing to enter into formal consultation with the USFWS on the effects of adoption of the California Desert Conservation Area Plan (CDCA) Plan, as amended, upon threatened and endangered species. On August 25, 2000, the BLM acknowledged through a court stipulation that activities authorized, permitted, or allowed under the CDCA Plan may adversely affect threatened and endangered species, and that the BLM is required to consult with the USFWS to ensure that adoption and implementation of the CDCA Plan is not likely to jeopardize the continued existence of threatened and endangered species or to result in the destruction or adverse modification of critical habitat of listed species.

Although BLM has received biological opinions on selected activities, consultation on the overall CDCA Plan is necessary to address the cumulative effects of *all* the activities authorized by the CDCA Plan. Consultation on the overall Plan is complex and the completion date is uncertain. Absent consultation on the entire Plan, the impacts of individual activities, when added together with the impacts of other activities in the desert are not known. The BLM entered into negotiations with plaintiffs regarding interim actions to be taken to provide protection for endangered and threatened species pending completion of the consultation on the CDCA Plan. Agreement on these interim actions avoided litigation of plaintiffs' request for injunctive relief and the threat of an injunction prohibiting all activities authorized under the Plan. These interim agreements have allowed the BLM to continue to authorize appropriate levels of activities throughout the planning area during the lengthy consultation process while providing appropriate protection to the desert tortoise and other listed species in the short term. By taking interim actions as allowed under Title 43 Code of Federal Regulations (CFR) Subpart 8341, the BLM contributes to the conservation of endangered and threatened species in accordance with Section 7(a)(1) of the ESA. The BLM also avoids making any irreversible or irretrievable commitment of resources which would foreclose any reasonable and prudent alternative measures which might be required as a result of the consultation on the CDCA plan in accordance with Section 7(d) of the ESA. On March 20, 2001, the stipulation respecting *All Further Injunctive Relief* became effective.

One outcome of the settlement discussions is *Stipulation and Proposed Order Concerning All Further Injunctive Relief (January 17, 2001).* Paragraph 38 of the *Stipulation* states, "BLM shall implement an emergency road closure in the West Mojave Plan Area in the following five route subregion polygons: Fremont, Kramer, Red Mountain, Newberry/Rodman, and Superior..." The paragraph goes on to describe the schedule for implementation and the public review process. According to Paragraph 51(F) of the *Stipulation*, this interim measure shall remain in effect until the record of decision for the West Mojave bio-regional plan is signed, which is anticipated in

June 2003.

In accordance with the agreement, BLM staff developed a proposed interim network of routes of travel to both provide for reasonable public access and minimize impacts to sensitive areas. This network was released to the public for a 90-day review and comment period. The opportunity for review and comment was announced through local media and direct mail to the BLM's mail list including the WEMO mail list. Additionally, a public meeting was held in Barstow to explain the proposal and solicit public comment on March 29, 2001. Maps depicting the proposed interim route network were made available at the public meetings and by mail to interested members of the public to facilitate field review of the route network. Comments were received throughout the comment period and continued through the development period of this EA. The comments included both general concerns about the WEMO planning process and specific comments regarding the proposed route network. Comments concerning the WEMO planning process have been forwarded to the WEMO Planning Team for inclusion in that process. Comments which were specific to the proposed route network were considered in the development of the Proposed Action for this action. As a result of comments received during the 90 days review, several changes were made to the initially proposed interim route network and are depicted in Appendix I, Newberry/Rodman Subregion Interim Route Proposal Comments. In effect public review and comment it is both part of the process for developing the West Mojave Plan as well as the process for meeting the requirements of the lawsuit.

PURPOSE AND NEED

The network of access routes has proliferated to an extensive level since the advent of mass-produced affordable rough terrain vehicles, interest in desert recreation, and the vast urbanization of the Los Angeles basin. As a result desert tortoise habitat has become highly fragmented.

The purpose of the proposed temporary area closure and interim open vehicle route network is to prevent or minimize impacts to the desert tortoise and desert tortoise habitat while the West Mojave Plan is being completed. Impacts to tortoises their designated critical habitat can occur from vehicle use. Although the presences of vehicles and routes in critical habitat do not necessarily result in impacts, the types, intensity, and frequency of vehicle use can result in habitat fragmentation and direct impacts to the desert tortoise of varying degrees. The relationship of the use of vehicles and habitat fragmentation as well as the inter-relationship of access impacts and the impacts from other human uses, wildland fires, exotic species, and diseases is complicated and not well-understood. The West Mojave planning effort will address these issues on a more comprehensive basis.

As noted above, this proposed restriction and the subject of this EA, is one of several for a number of areas subject to the lawsuit discussed above.

CHAPTER 2

Proposed Action

The proposed action is to temporarily close the Newberry-Rodman subregion to vehicle use except for vehicle use to an interim open access network in accordance with Title 43 Code of Federal Regulations (CFR) subpart 8341. The area and proposed interim network are shown on a map contained in Appendix II. The open routes will be signed "Open." Exceptions to the closure are BLM operation and maintenance vehicles; law enforcement, fire and other public service vehicles; and other vehicles permitted through a specific authorization by the BLM. This restriction will remain in place until the signing of the Record of Decision (ROD) for the West Mojave Plan, anticipated to occur in December, 2002.

Additionally, a brochure would be prepared to explain the need for the closure, illustrating which routes are available for use, present an appropriate land use ethic, and explain how the public may participate in the formal route designation process.

Public outreach, visitor contact, sign maintenance, and law enforcement will be focused in the restricted area both to support the restriction as well as to educate the public. Sign maintenance, and visitor contact and law enforcement patrols will be regularly scheduled. The primary focus of visitor service contacts will be on voluntary compliance of use of the signed routes. Additionally, an effort will be made to develop a force of volunteers that utilize this area to help with public outreach and sign and trail maintenance.

No Action Alternative

Under this alternative, there would be no restriction to the use of existing routes. The entire existing route network would continue to be available for use until route designation is completed through the WEMO planning process. Signing of the route system would not occur until the completion of formal route designation through the WEMO. The focus of visitor contact, public out reach, education, and law enforcement efforts would likely not change until the West Mojave Plan is completed.

CHAPTER 3

AFFECTED ENVIRONMENT

Location

The Newberry/Rodman subregion, located just south of Newberry Springs, California, is defined by Interstate-40 on the north, the Twenty-Nine Palms Marine Corps Base and the Johnson Valley Off-Highway Vehicle Area on the south, and Camp Rock Road on the west. The subregion is 81,585 acres in size, with 73.6% Federal land (60,012 acres) managed by the BLM and 26.3% private and State land (21,481 acres). The private lands are owned primarily by Catellus

Development Corporation.

Land Use

Current use of the public land within the planning unit consists of cattle grazing, utility corridor maintenance, and various recreational opportunities. The Newberry/Ord grazing allotment is partially located within the planning unit and consists of 140,028 acres of public land and 3,623 AUMs. In addition, utility corridor "G" runs along the northern boundary of the planning unit, while utility corridor "H" crosses the unit from north to south.

The California Desert Conservation Area Plan (CDCA),1980, as amended, directs that the western, eastern, and southern most portions of this subregion are managed as Multiple-Use Class M (moderate) and the central portion be managed as Multiple-Use Class L (limited). Multiple-Use Class L was applied in the central part of this planning unit to protect an area high in both cultural resources and sensitive wildlife species. The southern portion of the planning unit was designated Multiple-Use Class M to provide vehicle access for on-going mineral operations, and to serve as a buffer between the Johnson Valley Open Area, to the south, and the more sensitive areas to the north. The Multiple-Use Class M designation in the eastern portion was applied because of past mineral production and a large number of mining claims. The western portion was designated Multiple-Use Class M to serve as a buffer between the Newberry Mountain wilderness area and the water diversion dikes parallel to Interstate-40.

Air Quality

Air quality in the San Bernardino County region is not currently meeting two National Ambient Air Quality Standards (NAAQS) established by the Federal Clean Air Act (CAA). However, air quality throughout the proposed closure area in general, is considered good. The region is currently in non-attainment for PM_{10} (particulate matter of 10μ or less) under the CAA. All Federal Projects (i.e., those subject to NEPA) are required to conform to provisions of the CAA. A State Implementation Plan (SIP) has been prepared for the Mojave Desert Planning Area, which identifies sources of PM_{10} emissions and identifies control measures to reduce these emissions. In addition the area is in non-attainment for ozone, however, ozone emissions are primarily transported from outside this air basin and have been addressed separately by Mojave Desert Air Quality Management District.

Cultural Resources

The unit is within the traditional territory of the Vanyume Serrano and Chemehuevi (post contact) and may have been used by Mojave during prehistoric periods. Occupation of the area spans the last 12,000 years. Significant sites occur within the unit, to include a listed National Register District (Rodman Mountains Rock Art District) and Newberry Cave, a prehistoric site listed on the National Register of Historic Places. Sites types run the range between simple sparse lithic scatters and isolated tools to complex habitation sites. More than eighty (80) sites have been formally recorded within this unit. Sites types known to occur within the unit include rock art, rock shelters, rock cairns and stone circle sites, lithic scatters/lithic reduction sites, large diverse lithic quarry sites, prehistoric habitation sites, burial/cremation sites, mining camps,

historic period refuse scatters, and a National Register eligible transportation site, Route 66. Sites that are crossed by or immediately adjacent to routes recommended Open include a cairn site, historic period mining sites, lithic scatter/reduction sites, quarry sites and rock art sites.

General Vegetation

Although no State or federally listed threatened or endangered plant species occur within the planning unit, two BLM designated sensitive plants; Mojave Monkeyflower (*Mimulus mohavensis*) and White-margined beardtoungue (*Penstemon albomarginatus*), known to occur within this planning unit. Crucifixion Thorn, a CNPS List 2 species is also know to occur. It is considered rare, threatened, or endangered in California, but is more common elsewhere. Crucifixion Thorn provides an important wildlife habitat and several UPAs are established to protect it outside this planning unit.

The Fry Mountain Ancient Mojave Yucca Clone constitutes an Unusual Plant Assemblage (UPA) within the Newberry-Rodman planning unit. In addition, the Johnson/Lucerne Valley Creosote Bush Clone UPA can occur at lower elevations. The Creosote Bush Rings are the oldest known living plants in the California desert; estimates place them at 11,000 years old. These UPAs are considered sensitive plant communities and the CDCA Plan directs that impacts to this assemblage are avoided. No new surveys for sensitive vegetation were conducted along any routes associated with this interim vehicle route identification effort. Analyses are based on the CDCA Plan, BLM office records, BLM management plans for adjacent public land areas, RAREFIND Natural Diversity Database records, previous EAs, and staff familiarity with terrain and plant communities occurring in the planning unit.

Several vegetative communities occur in the planning unit, including the predominant Creosote Bush Scrub, at low to moderate elevations. Mojave Mixed Woody Scrub and Mojave Mixed Steppe occur at moderate to high elevations and Blackbrush Scrub occurs at the highest elevations. Mojave Wash Scrub occurs in area washes. The fragrant smell of Desert Willow (*Chilopsis linearis*), the prickly thorns of Catclaw (*Acacia greggii*) and the bright green color of Sweetbush (*Bebbia juncea*) characterize the desert wash community. Riparian habitats and flowing water springs too, infrequently emerge in brilliant green pockets along canyon walls and valley edges of this Planning Unit. These riparian plant communities are characterized, when functioning properly, by a variety of wetland emergents, Black Willow (*Salix nigra*), Seep-willow (*Baccharis* spp.) Arizona Ash (*Fraxinus velutina*) and occasionally introduced Cottonwood (*Populus fremontii*); and can best be termed Transmontane Alkali Marsh plant communities.

General Wildlife

More than 100 vertebrate wildlife species and an unknown number of invertebrate species are suspected to use, occupy or visit the vegetative communities described for this planning unit above, including several BLM sensitive species and California State Animal Species of Special Concern (Table 1). Some plant communities within this planning unit, such as Mojave Desert Wash and Mojave Mixed Woody Scrub, as well as terrain features such as boulder fields, have

all of these wildlife species either occurring in, or visiting, on an irregular basis. Others, such as Blackbrush Scrub and Mojave Mixed Steppe, are utilized by a smaller complement of wildlife species, but these animals are usually highly specialized, i.e., Desert Bighorn Sheep (*Ovis canadensis nelsoni*).

Table 1.

BLM Designated Sensitive Animal Species (S) and California State Animal Species of Special Concern (SC) occurring within the Newberry-Rodman Planning Unit.

Common Name	**Latin Name**
Desert Bighorn Sheep (S)	*Ovis canadensis nelsoni*
Pallid Bat (S/SC)	*Antrozous pallidus*
Townsend's Big-eared Bat (S/SC)	*Corynorhinus townsendii*
Ringtail (SC)	*Bassariscus astutus*
Prairie Falcon (SC)	*Falco mexicanus*
Golden Eagle (SC)	*Aquila chrysaetos*
Burrowing Owl (S/SC)	*Athene cunicularia*
Loggerhead Shrike (SC)	*Lanius ludovicianus*
Bendire's Thrasher (S)	*Toxostoma bendirei*
Le Conte's Thrasher (SC)	*Toxostoma lecontei*
Mojave Fringe-toed Lizard (S)	*Uma scoparia*

Some species include those primarily associated with creosote scrub lands, such as black-throated sparrow (*Amphispiza bipinnata*), hornedlark (*Eremophila alpestris*), lesser goldfinch (*Carduelis psaltria*), desert iguana (*Dipsosaurus dorsalis*) and western whiptail lizards (*Cnemidophorus tigris*). Other prey species are specifically associated with canyons, washes and yucca stands. These include the cactus wren (*Campylorhynchus brunneicapillus*), rock wren (*Salpinctes obsoletus*), canyon wren (*Catherpes mexicanus*), Le Conte's thrasher (*Toxostoma lecontei*), blue-gray gnatcatcher (*Polioptila caerulea*), verdin (*Auriparus flaviceps*), sideblotched lizard (*Uta stansburiana*), chuckwalla (*Sauromalus obesus*), desert spiny lizard (*Sceloporus magister*) and a number of rattlesnakes (*Crotalus* spp.).

One of the most conspicuous herbivores of the planning unit is the harvester ant (*Pogonomyrmex califonicus*) and one of the least conspicuous predators is the desert-horned lizard (*Phrynosoma platyrhinos*), which feeds upon these ants. This one ant species may also be partially responsible, along with the many granivorous rodents native to the planning unit for much of the biomass and diversity patterns found here. The desert-horned lizard is but one of the animals who avoids compacted route surfaces where possible as loose sand needed for camouflage is often lacking.

An invertebrate inventory of the planning unit has yet to be completed, but the surface water in permanent natural water basins of the planning unit, are inhabited by a wide variety of insect

species and a somewhat lower number of amphibian species, during part or all of the year. Even ephemeral water areas support some of these species. This is also true for rock crevice areas located adjacent to such water basins. These riparian and riparian-influenced habitats, as well as densely vegetated desert washes, usually support higher overall wildlife densities and bio-diversity.

Four insectivorous bat species are known to make extensive use of mine shafts, adits, boulder hillsides and rock crevice cliffs located near springs and washes in the planning unit. All have different roosting preferences, activity emergence patterns and water intake requirements. These species included: the pallid bat (*Antrozous pallidus*), which uses mine shafts/adits and rock crevices to roost in; the Townsend's big-eared bat (*Corynorhinus townsendii*), which uses mine shafts/adits exclusively as roost areas, and generally roosts only near water; the western pipistrelle (*Pipistrellus hesperus*), which roosts in crevices and generally forage near water; and California myotis (*Myotis californicus*), which roosts in crevices, mine shafts and adits. All of these bats forage along washes, hilltops and slopes, as well as in the immediate vicinity of water.

Several informal bat surveys have been completed in this planning unit, and an extensive formal bat survey was completed in the adjacent Ord planning unit. The four bats identified above have been documented using different mine shafts/adits for roosting, foraging and even watering, in the central Ord Mountain region and the Newberry-Rodman planning unit. In addition, as many as ten insectivorous bat species could use a suitable habitat (mine shafts and adits, boulder hillsides and crevice-cliffs); probably in a few, small breeding colonies and several, highly dispersed bachelor roosts similar to that observed with known bat species of the area. No bat hibernicula has yet been identified, though higher elevations may be conducive to such use.

Desert bighorn sheep are also highly dependent upon these rare water sites, and often use specific washes or mountain ridge lines between foraging areas, within the planning unit, as travel corridors. This planning unit has one of the smallest bighorn herds in the California Desert. The herd was not even recorded locally until the mid-1980s. The primary use area for this bighorn herd is within the Newberry Mountains Wilderness located in the northwest of the planning unit. All of the Newberry and Rodman Mountains are considered occupied habitat for bighorn sheep, and a linkage to the Bullion Mountains at the Twenty-nine Palms U.S. Marine Corps Air-Ground Combat Center extends through the Lava Bed Mountains and Iron Ridge. The WEMO Evaluation Report for bighorn sheep calls for the maintenance and enhancement of all occupied habitat and the creation of linkages to selected areas.

Several raptor species, including prairie falcons, golden eagles, burrowing owls, barn owls (*Tyto alba*) and great horned owls (*Bubo virginianus*) are known to nest, forage and winter within this planning unit. Most nesting areas are located in higher elevation terrain with appropriate cliffs faces, although mineshaft and adits, as well as yucca stands situated near tortoise habitat, are also used for nesting purposes by various species of owls. Boulder hillsides, valleys, ridge lines and mountaintops are primary foraging areas. The high raptor density here prompted the BLM to designate the unit as the "Newberry-Granite Mountain Raptor Breeding Area" and also

recommend that a Habitat Management Plan (HMP) be prepared for affected species. No such HMP has been completed and raptor monitoring has not occurred within this planning unit since the 1970s.

The sand deposits surrounding Pisgah Crater support populations of the Mojave fringe-toed lizard. About 3,800 acres of occupied habitat are found within the planning unit. The Mojave fringe-toed lizard is limited to discrete, disjunct populations throughout its range, and many of these are vulnerable to loss through elimination of the sand source, stabilization of habitat, or direct loss by vehicle traffic. The WEMO Evaluation Report calls for protection of seven of the ten populations, including the one at Pisgah Crater. Reduction of vehicle use in the occupied habitat is the primary management prescription at this location.

Threatened and Endangered Wildlife

Only one listed wildlife species is known to occur within the affected area: the desert tortoise (*Gopherus agassizii*), State and federally listed as threatened. The Newberry-Rodman planning unit has been designated as critical habitat for this species, and the *Desert Tortoise (Mojave Population) Recovery Plan* (USFWS 1994) has previously recommended completion of route designation in the "Ord-Rodman Desert Wildlife Management Area", which includes this planning unit. Historic populations have been recorded as ranging from 0 to 250+ tortoises per square mile, with the higher densities occurring in small, patchy areas of relatively low anthropogenic impact.

Most of the planning area is suspected to support tortoise densities in the range of 20-50 animals per square mile. Higher densities consistently occur in the far western portion of the unit, while moderate densities occur in the region of Pisgah Crater. There is a very small area of highest density (250+) near the Dagget Ridge and Camp Rock Road area. The entire unit has been previously characterized as a High, Moderate, Low or Non Desert Tortoise Emphasis Zone (DTEZ), in relation to potential route designation. The central portion of the unit is undesignated as tortoise habitat, although pockets of suitable habitat undoubtedly occur within this large area. Pisgah Crater is a transition zone between desert tortoise populations in the eastern and western Mojave Desert. Pisgah Crater has been proposed as an Area of Critical Environmental Concern (ACEC) in the WEMO plan, and the CDCA Plan designates it as a Research Natural Area.

Baseline desert tortoise data provided by the Southwestern Regional Line Distance Sampling Effort (USFWS, 2001) encountered a relatively high number of live desert tortoise in the Ord/Rodman sampling unit. Moreover, this sampling unit had a high number of tortoise carcasses encountered along transect lines, compared to other sampling units in California. There is apparently a viable population of desert tortoises in the Newberry-Rodman planning unit. However, with the evidently high mortality of desert tortoises in the planning unit the continuance of this population is uncertain. BLM special status species management directives require that all activities affecting the populations and habitat of listed species, such as the desert tortoise, be consistent with recovery needs and objectives.

Invasive, Non-native Species

Invasive, nonnative plants of this planning unit include several Mediterranean annual grasses and forbs, such as Brome Grass (*Bromus madritensis*, *B. tectorum*, *B. trinii*), Split Grass (*Schismus barbatus*, *S. arabicus*) and two mustards (*Brassica nigra*, *B. tournefortii*). Although these exotic annual species are largely naturalized, precipitation and fire patterns can influence their overall abundance. These plants are primarily established in the Creosote Bush Scrub plant community, and to a lesser extent in the Mixed Mojave Woody Scrub and Mojave Mixed Steppe plant communities. Extensive research has been undertaken in the adjacent planning unit which documents a positive correlation between areas of high native plant species richness, density and biomass and areas of low alien plant abundance. Furthermore, alien plant species richness and biomass have been found to be generally higher than that of natives, where soil nutrients are relatively high, such as areas located adjacent to roads. Research has also documented a decline in alien plant species richness in areas radiating out from roads.

Mojave Desert fire frequency appears to be most prevalent in areas where these alien plants are established. If burned repeatedly, creosote and mixed woody scrub lands are often type-converted to exotic annual grass fields. Recent research has shown that alien annual grasses contribute more than alien or native forbs to the frequency and cover of fire fuels. It has also been demonstrated that both the alien forb *Bromus* and the alien grass *Schismus* carry flames across the landscape. However, only *Bromus* produces flame lengths and temperatures sufficient to ignite perennial shrubs such as creosote bush. In general, brome grass occurs in creosote canopies or alongside roads, and split grass occurs in the interspaces between shrubs. In areas where fire ignition points (routes with mustards and grasses) and/or the dominance of alien grasses between shrubs is reduced or absent, fire frequency and size are usually reduced in comparison to where these invasive nonnative species are both abundant.

Soils and Erosion

The Newberry-Rodman planning unit consists of a very diverse suite of rocks and minerals. Bedrock consists of Pre-tertiary intrusives and metamorphics dominated by monzonite, diorite/gabbro and gneiss. These rocks represent the buried bedrock within both the mountainous portions and valleys of the planning area. Although consisting of high-density rock and minerals, the abundance of feldspars and schist facies within most of the area's rock formations, poses high erosion potential. Younger rocks in the area are represented by extrusives such as basalt, andesite and rhyolite. The deposits of most recent age are sands and gravel eroded from the higher elevation. Structurally, the project area is located within the Barstow-Bristol Trough and is bisected by the Lenwood Fault. As can be expected in an area with such diverse igneous and metamorphic rock assemblages, there has been significant mineralization. Veins of quartz monzonite are the host rock for most of the gold and tungsten found in the area. Commercial production has occurred in the area for some time. As noted above, construction materials (crushed rock, sand and gravel) are being produced from the northwest area of the Newberry Mountains. There has been production of placer gold at the Camp Rock mine. Cinders have and are being produced from Pipkin Cinder Cone (Malpais Crater) in the south-central part of the planning unit. Borates and specialty clays are produced in the eastern part of the subregion.

Soils are primarily shallow, composed of fine-grained materials in some areas and coarse-grained in others. Both are frequently covered with desert pavement, fine gravels or cobble. A few specific vicinities within the planning area are considered to have highly erosive soils, these are particularly susceptible to erosion if the fine gravels covering them are removed or compacted. The soils in this planning unit have been described in a detailed manner within the State Soil Geographic (STATSGO) Data Base, compiled by the National Soil Survey Center of the USDA Natural Resource Conservation Service (Miscellaneous Publication Number 1492).

Recreation

Most visits to the Newberry Rodman Planning Unit consist of driving for pleasure or the use of an off-highway vehicle. Other common activities include general nature appreciation, wildflower appreciation, photography, natural resource studies, visitation of rock art and other cultural resource sites, target practice, mountain bike riding, horseback riding, rock hounding, and hunting. Furthermore, these recreational activities are not thought mutually exclusive, e.g., it is common for visitors to drive an off-highway vehicles on both easily traveled and challenging routes to get access to a favorite remote area, set up camp, spend time hiking and target practicing. There are three highly rated interpretive sites within the planning unit: the Newberry Mountain Caves, Pipkin Cinder Cone, and the Rodman Mountain petroglyphs.

The small number of major roads in this Planning Unit accounts for a relatively low degree of thoroughfare transportation use, though driving for pleasure use levels in the unit remains high on unimproved routes. Both activities are largely due to the presence of long standing traditional use.

Areas of Critical Environmental Concern (ACECs)

The Rodman Mountains ACEC is located within the subregion. It is almost entirely within the Rodman Mountains Wilderness Area. Its values are discussed above under cultural resources.

Other Topics not carried forward into Chapter 4

Environmental Justice: Persons using the area proposed for temporary closure include all income levels. There would be no disproportionate affects to minority or low income people.

Farmlands: No farmlands would be directly or indirectly affected by either action.

Flood Plains: No flood plains would be affected.

Non-native Species: There would be no net affect on weed species populations.

Native American Concerns: There are no known concerns expressed after informal consultation with Native Americans.

Visual Resources: The area of the proposed closure shows gravel pits, roads and the remains of

previous disturbance. There would be not net effect to visual resources.

Hazardous Wastes: There would be no net effect on any hazardous substances.

Wild and Scenic Rivers: There are no designated wild and scenic rivers in the area.

CHAPTER 4

ENVIRONMENTAL CONSEQUENCES OF PROPOSED ACTION

Table 1. Critical Elements Checklist

Critical Element	Potentially Affected		
	yes	no	
ACECs		x	
Air Quality	x		
Cultural Resources	x		
Environmental Justice		x	
Farmland, Prime/Unique		x	
Floodplains		x	
Invasive, Non-native Species	x		
Native American Religious Concerns		x	
T&E Vegetation	x		
T&E Wildlife	x		
Water Quality		x	
Wastes, Hazardous/Solid		x	
Wetlands/Riparian Zones		x	
Wild & Scenic Rivers			x
Wilderness		x	

Land Use
The route network was developed in consideration of access to mining operations and utility corridors. The closure will not impact these activities.

Air Quality
The implementation of the proposed action would have a positive long term affect on air quality. There would be an overall reduction of fugitive dust emission, a precursor to PM-10 through the closure of routes. Based on the anticipated reductions in emissions generated form the implementation of the proposed action, the new emissions generated under the proposed action would not exceed de minibus levels for PM-10 (100 tons/year) and would not be regionally significant; therefore, no further reasonably available control measures are required. The

activity conforms to the CAA and plans identified to maintain and improve air quality in non-attainment areas.

Cultural Resources

Direct, indirect, and residual impacts to cultural resources Proposed Action include degradation of sites crossed by or immediately adjacent to open routes, and decreased impacts to sites adjacent to closed routes. There is a potential for increased traffic and subsequently higher impacts due to the limited number of open routes in the unit.

General Vegetation

The Proposed Action has involved general vegetation identification and conservation in its overall scope. Consequently the effects of the Proposed Action are considered beneficial to general vegetation resources and route signing (Proposed Action) is likely to affect a substantial benefit.

Direct adverse impacts to general vegetation as a result of the Proposed Action include the potential for minor vehicle travel, parking, camping, and intentional route proliferation-related soil disturbance in proximity to identified open routes. As a result, indirect impacts associated with the Proposed Action would include the potential for additional weed establishment and fire occurrence along these routes, that could impact vegetation community dynamics adjacent to these routes. Overall, these impacts are considered slightly reduced in the Proposed Action. Native vegetation and plant community dynamics in areas affected by routes would improve slightly under the Proposed Action. Vegetative mortality, injury, and non-native weed establishment, associated with soil loss and erosion, would be reduced by route closure and, the potential for route proliferation would also be reduced. In general, indirect adverse impacts to general vegetation as a consequence of this alternative are considered less severe.

Sensitive Vegetation

A potential for increased vehicle travel on existing routes is anticipated due to closing routes which will move people off closed routes to the open route network. . The Proposed Action has involved sensitive vegetation identification and conservation in its overall scope. The effects of the Proposed Action are considered beneficial to sensitive vegetation resources. However, route signing (Proposed Action) is unlikely to affect a substantial benefit, other than identification of route implementation issues and initial route closure needs.

The two Unusual Plant Assemblages (UPA), identified in the Affected Environment section, would benefit from the Proposed Action, as impacts to these assemblages would be minimized. . BLM-designated sensitive plant species would be avoided in all signing efforts. No new direct impacts of an adverse nature to sensitive vegetation are anticipated as a result of the Proposed Action.

General Wildlife

A potential for increased vehicle travel on existing routes is anticipated for the near future. Steps to implement a route system of designated open, limited, and closed routes with minimal impacts

to general wildlife would occur with the Proposed Action,. The Proposed Action has involved general wildlife identification and conservation in its overall scope. Consequently the effects of the Proposed Action are considered beneficial to general wildlife resources.

Indirect adverse impacts of the Proposed Action, i.e. route signing, would include the likelihood of increased vehicle travel-related habitat structure (soil, water, vegetation, boulders, mine shafts) disturbance in the immediate proximity of identified open routes, including that related to fire/weed influences, and human presence-related disturbance.

In general, the potential for indirect adverse impacts to general wildlife occurring within the planning unit as a consequence of route signing specified in the Proposed Action, are considered low and limited in occurrence,

Sensitive Wildlife

A potential for increased vehicle travel on existing routes is anticipated for the near future. The Proposed Action has involved sensitive wildlife identification and conservation in its overall scope. Consequently the effects of the Proposed Action are considered beneficial to sensitive wildlife resources. No direct adverse impacts to BLM-designated sensitive animal species are anticipated as the result of the proposed action.

Indirect adverse impacts of the Proposed Action, i.e. route signing, would include the likelihood of increased vehicle travel-related habitat structure (soil, water, vegetation, boulders, mine shafts) disturbance in the immediate proximity of identified open routes, including that related to fire/weed influences, and human presence-related disturbance.

Overall fragmentation of sensitive wildlife habitat would be reduced under the Proposed Action. The number of routes designated open in the Proposed Action would have a greater positive effect upon biotic resources in the planning unit. This is considered particularly so for raptors and desert bighorn sheep, who have limited nesting, lambing, and watering habitat available in proximity to appropriate prey/forage base; and in general, much less so for crevice-roosting bats, whose habitats are more widespread and available for use.

Threatened & Endangered Wildlife

A potential for increased vehicle travel on existing routes is anticipated for the near future. The Proposed Action has involved T&E wildlife identification and conservation in its overall scope. Consequently the effects of the Proposed Action are considered beneficial to T&E wildlife. However, route signing (Proposed Action) is unlikely to affect a substantial benefit, other than identification of route implementation issues and initial route closure needs,

The desert tortoise is the only threatened and endangered (T&E) species known to occur within the planning unit. The most substantial direct impact to tortoises as a result of the Proposed Action would include a moderately decreased mileage of open routes in tortoise critical habitat, The simple presence of a vehicle route in desert tortoise habitat does not necessarily equate to a

specific direct impact, aside from the lack of cover, burrowing substrate and forage present within the confines of that specific route. However, the type, intensity, and frequency of vehicle use on specific routes can facilitate direct accidental and intentional impacts to tortoises occurring in proximity to open or existing routes. Specific direct adverse impacts to tortoises residing near open routes may or may not occur over time.

Direct impacts to desert tortoises of an adverse nature are not anticipated as a result of sign installation required by the Proposed Action. No suitable habitat for this species is anticipated to be disturbed. Should a situation of potential tortoise "take" arise, or a potential for adverse tortoise habitat modification be identified, in the site-specific evaluation of implementation actions associated with the proposed action, additional environmental analysis and/or USFWS consultation and CDFG conference would be required.

Indirect impacts would include a continued possibility of minor vehicle travel-related habitat structure disturbance and alteration (including fire and weed influences) or removal; as well as a continued potential for human presence-related disturbance, in the immediate proximity of designated open routes. A high potential for minor habitat structure alteration, weed establishment and fire occurrence is considered a likely indirect impact of vehicle use on all routes under the interim proposal. Should fire occur, these indirect impacts could affect small numbers of tortoises whose territories encompass vehicle routes, in relation to forage nutrition, fire mortality and/or the appropriate spacing of escape cover. In addition, roads, routes and potential fire/weed impacts considered collectively also pose a potential for large-scale vegetative type conversion, indirectly affecting larger numbers of desert tortoise in particular areas. Grasslands, which often replace native shrub-lands in type-conversion instances, offer little in the way of suitable habitat for tortoises.

Fragmentation of desert tortoise habitat under the Proposed Action is reduced. Information pertinent to tortoise habitat and population fragmentation related to vehicles/route use is extremely limited. Fragmentation is likely to cause a narrowing of habitats, which can be significant for wide-ranging species or animals that have limited access to resources.

No adverse modification of desert tortoise critical habitat is anticipated to occur as the result of the Proposed Action, and the potential for project-related incidental take of a threatened species is considered very minimal. The Proposed Action implements several Desert Tortoise Recovery Plan actions and that could ultimately have a positive affect on the species, however the interim route signing (proposed action) is unlikely to have substantial benefit.

Invasive, Non-Native Species

There continues to be the potential for the facilitation of exotic plant establishment/spread over time along road shoulders of identified open routes; this would apply particularly so in the vicinity of parking/turn-around areas. Since there will be less open routes, there is less potential for invasive, non-native plant spread.

Soils/Minerals

A potential for increased vehicle travel on existing routes is anticipated for the near future. . The Proposed Action has involved soils conservation in its overall scope. Consequently the effects of the Proposed Action are considered beneficial to soil resources. However, route signing (Proposed Action) is unlikely to affect a substantial benefit, other than identification of route implementation issues and initial route closure needs.

The routes previously designated have been in existence for 5 to 50 or more years. Further direct soil impacts within these open, closed routes is considered unlikely, though accelerated erosion could occur on many in the future, dependent on type, intensity and frequency of vehicle use, affected terrain and soil strata, as well as the season of vehicle use. The Proposed Action would result in greater soil improvement on closed routes, and continued erosion potentials over time on the remaining open routes.

Adverse indirect impacts of the Proposed Action related to soils/erosion potentials of this planning unit would include the likelihood of vehicle travel-related soil disturbance in the immediate proximity of designated open and closed routes, as a result of vehicle straying/turning, parking and camping. Monitoring of route conditions throughout the entire route network as prescribed in the CDCA Plan and implementation of corrective actions would minimize the severity of these adverse indirect impacts.

Recreation

The proposed action would result in an interim reduction in the available route network from the existing inventory for motorized vehicles to 130.2 miles, a 60% reduction. While access to most recreational points of interest, and for most recreational pursuits is provided, this reduction will affect those that seek the feeling of primitive back country exploration by vehicle by focusing all vehicle use on this much smaller network. On the other hand, this reduction of use and routes will benefit the non-OHV recreational experience in that the scenic quality of the area will increase over time, although some destinations may become less readily accessible. Game bird species will likely increase as disturbance decreases and habitat values increase, and the overall opportunity for recreation dependant on quiet solitude will be enhanced. Effective on-the-ground signing and open route berm maintenance would be beneficial in directing travelers within the open route network to where they want to go. Future agency outreach efforts, including strategically placed kiosks with area information and maps, as well as regular ranger visitation, would be provided. Visitors would still be responsible for knowing the rules and regulations relevant to public lands, including those related to vehicle travel.

The affect of this action is thought to be an overall reduction of impact from the current situation. As such, there are no residual impacts associated with the implementation of this action.

Cumulative Impacts

Human Uses

The reduction of available routes and the increase in BLM presence may result in some vehicle recreationists relocating their activities to other parts of the desert. As part of the public outreach program, BLM will encourage use of the Stoddard Valley OHV Area, and Johnson Valley OHV Area; however, it is impossible to predict how much and where this use will go or what new impacts might arise in new locations. Johnson and Stoddard Valley Open Areas offer a less formal management approach which is intended to satisfy this need.

In addition to the proposed restriction others are being proposed for Fremont, Kramer, Red Mountain, Superior, and the Edwards Bowl areas and for the same reasons. All these proposed restrictions are temporary pending completion of the West Mojave Plan. They would cover large areas in the West Mojave planning area for two or more years into the future. The overall impacts of these closures can not be predicted as the proposals have not all been developed, but the cumulative effect on the route network will be substantial. However, in each case developing the interim open network of routes includes public participation and consideration of many kinds of access needs: e.g., hunting, rock-hounding, equestrian staging, and recreational touring.

Species and Habitats and cultural values

The cumulative effects of this action, and future temporary restrictions noted above, would have a positive affect for species and habitats. Cultural resources would also benefit from these restrictions. However, the public would no longer have vehicular access to certain

As these proposed restrictions also apply to the development of the West Mojave Plan, that plan and EIS will further define and analyze the cumulative effects of routes of travel designation.

ENVIRONMENTAL CONSEQUENCES OF THE NO ACTION ALTERNATIVE

Land Use

There are no impacts to existing land uses.

Air Quality

There are no new impacts to air quality identified based on the No Action alternative. Localized, heavy emissions of fugitive dust would continue, primarily on week-ends. During times of heavy OHV use, the 24 hour standard for PM-10 could be violated. Compared with the proposed action, air quality impacts would be anticipated to be somewhat higher under this alternative, based on overall traffic loads.

Cultural Resources

Vehicle use and impacts to sites would continue on the extensive route network with the no action alternative.

General Vegetation

Adverse impacts to general vegetation would continue to occur from minor vehicle travel, parking, camping and intentional route proliferation-related soil disturbance in proximity to existing routes. As a result, indirect impact associated with No Action would include the potential for weed establishment and fire occurrence along these routes, that could impact vegetation community dynamics adjacent to them.

Native vegetation and plant community dynamics in areas affected by routes would continue to degrade to varying degrees at different sites under the No Action Alternative. Varying degrees of vegetative mortality, injury, and non-native weed establishment, associated with soil loss and erosion, would continue unimpeded along existing routes, and these impacts would also spread along areas of route proliferation.

Sensitive Vegetation

The two Unique Plant Assemblages (UPA) in the Newberry Rodman region, Johnson Valley / Lucerne Valley Creosote Bush Clones and Fry Mountain Ancient Yucca Clones, would continue to be affected to varying degrees by the current situation. The two BLM sensitive plants in this area, white-margined beardtongue and Mojave monkeyflower, could continue to experience negative impacts from vehicle usage in relation to occupied habitat.

General Wildlife

Vehicle related wildlife mortality and habitat loss of various degrees in some areas would continue unimpeded in the planning area under the No Action Alternative. Constituent elements comprising wildlife habitat, including adequate forage, burrowing substrate, and vegetative cover/structure would continue to be negatively affected to varying degrees.
A high potential for weed establishment and fire occurrence is considered a likely indirect impact of vehicle use on the current route network for the planning unit. Such an indirect impact could affect general wildlife species whose territories encompass open routes, in relation to forage nutrition, fire mortality rates and/or the appropriate spacing of escape cover. The two indirect impacts of weeds and fire considered collectively, also pose a high potential for large-scale vegetative type conversion, affecting larger numbers of general wildlife species in particular areas.

Overall fragmentation of general wildlife habitat related to the No Action Alternative is thought to be greater than that related to the Proposed Action. Further fragmentation of upland and riparian habitats would have a negative impact on the populations of larger and long-lived animals as well as wetland dependant avian species. Specifically, this impact is considered particularly important for raptors and desert bighorn sheep, and in general, for various breeding birds and bats.

Sensitive Wildlife

Possible mortality of, and habitat loss for, sensitive wildlife species, such as the burrowing owl, would continue in Newberry Rodman under the No Action Alternative. Constituent elements comprising the affected species habitat including adequate forage, burrowing substrate, and vegetative cover/structure would continue to be negatively affected, with the No Action Alternative.

The Le Conte's thrasher and Bendire's thrasher would likely be indirectly impacted under the No Action Alternative through human disturbance and loss of preferred shrub habitat.

The potential for indirect impacts (fire, weeds, vegetative type conversion), as well as wildlife population fragmentation, is considered greater with the No Action Alternative.

Threatened and Endangered Wildlife

A potential for increased vehicle travel on existing routes is anticipated for the near future. Steps to implement a route system of designated open, limited, and closed routes, with minimal impact to threatened and endangered wildlife would not occur with the No Action Alternative, contrary to CDCA Plan direction, BLM manual instruction, and several executive orders.

Invasive, Non-native Species

A potential for increased vehicle travel on existing routes is anticipated for the near future. Steps to implement a route system of designated open, limited, and closed routes, with increase control of invasive, non-native species would not occur with the No Action Alternative, contrary to CDCA Plan direction, BLM manual instruction, and several executive orders.

Because vehicle use would continue on all existing routes, there is a potential facilitation of exotic plant establishment/spread occurring over time, along the road shoulders of designated open and limited use routes. This applies particularly so in the vicinity of parking and turn-around areas. This impact is considered negative overall and widespread in occurrence. The possibility that invasive, non-native species would be spread through this activity is considered greatly increased over that of the Proposed Action. Additionally, since soil disturbance and vegetative injury/mortality would occur over a greater area, more area would be susceptible to invasion by non-native invader species. The non-native species would most likely continue to spread and colonize in disturbed and undisturbed areas, leading to a possible plant community type conversion, from a desirable plant community, to a less desirable, weedy plant community.

An increase in the fire regime and a loss of forage plant species for listed species like the desert tortoise, within the Newberry Rodman area, is highly likely with the establishment of a weedy plant community. Indirect impacts from invasive, non-native plants includes a facilitated potential for vegetative type-conversion of plant communities located adjacent to where these plants occur, in conjunction with recurrent fire. If fire were to occur, such an influence could result in a range of impact severity, affecting vegetation adjacent to open routes. In general, non-native species spread out at the expense of the natives following recurrent fire, with shrub-lands

often replaced with grasslands or "type-converted" in particular areas over time.

Soils/Mineral

Further direct soil impacts within the disturbed confines of existing routes is considered possible on a few and probable on many, as they were situated without regard to soil conservation or erosion mitigation. Accelerated erosion could occur on many in the future, dependent on type, intensity and frequency of vehicle use, affected terrain and soil strata, as well as the season of vehicle use. The No Action Alternative would result in further deterioration of soil and higher erosion potentials over time. Soils in the planning area are highly erosive and related adverse residual impacts are considerably magnified in high vehicle use areas and where slope extremes are encountered. Vehicle use-related impacts in these highly erosive soil areas will not be alleviated through adoption of the No Action Alternative.

Recreation

There would be no impact to vehicle based recreation from the No Action alternative as vehicle use would continue as in the past. Opportunities for those forms of recreation that rely on quite solitude and an unaffected natural environment would continue to be degraded.

IMPLEMENTATION STRATEGY:

Patrolling

Patrolling by law enforcement, recreation, and visitor services personnel is a high priority task because such patrols help minimize damage to cultural and recreational resources, as well as sensitive plant and wildlife species. Patrols are critical to obtaining compliance with the vehicle access route network. Visitor Service and Recreation staff would patrol open routes to make outreach contacts with visitors, to install and repair signs, and to remedy any non-compliance with the route network (e.g., rake out or disguise OHV tracks on closed routes). They would also identify where maintenance is needed, where violations are occurring, and collect other information on specific routes.

Sign Implementation

The following suggestions have been formulated to assist on-the-ground signing within the Planning Unit:

- All routes available for use would be signed as open.
- Signs stating "Motorized Vehicle Travel Limited to Routes Signed Open" will be installed at all major entrances and at congregation areas.
- A kiosk will be constructed to display important information including a map of open routes, information regarding the Desert Tortoise, "Pack It In Pack It Out", rules for shooting, Tread Lightly/Leave No Trace land use ethic, and information regarding other appropriate places for OHV recreation.
- Junctions of closed routes would not need signs, except in unusual circumstances.

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